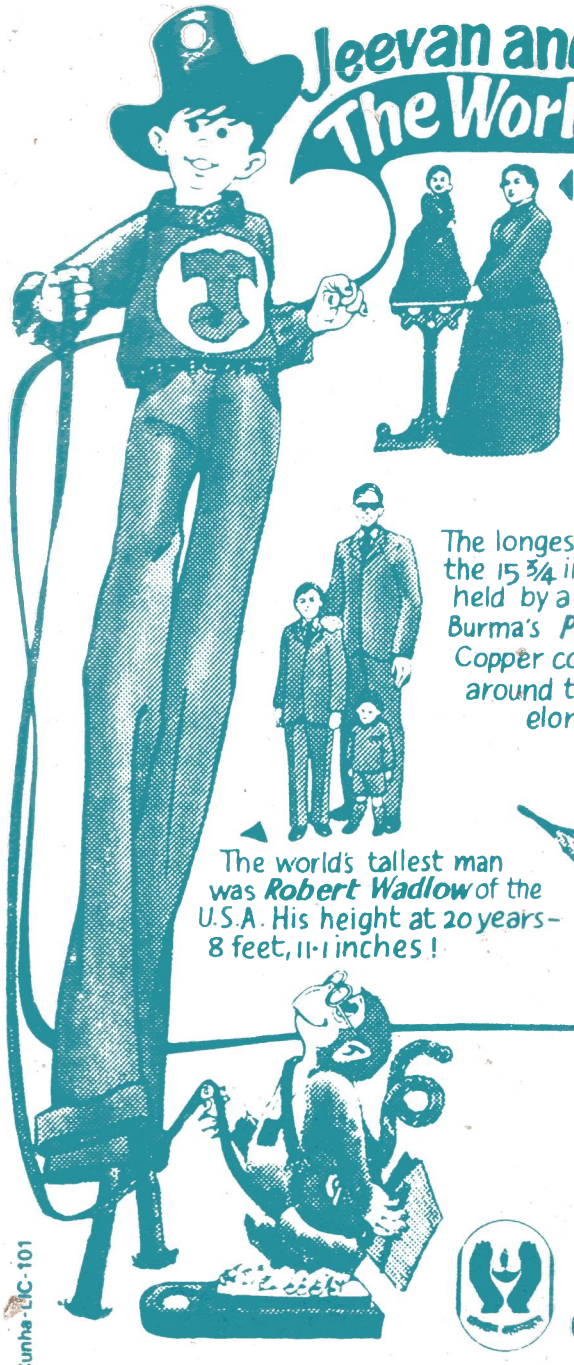
sunshine

The Magazine for Youth

anuary 1981
Rs.1.50

Jeevan and Hanu introduce: The World's Oddest Figures



The shortest adult ever known was ***Pauline Musters*** of Holland. At 19 years she measured merely 23·2 inches!

The world's heaviest human was ***Robert Hughes*** of the U.S.A.- he grew from an 11·14 pound baby to a 1,069 pound adult.

The world's tallest man was ***Robert Wadlow*** of the U.S.A. His height at 20 years- 8 feet, 11·1 inches!

The longest human neck: the 15 3/4 inch record is held by a woman of Burma's ***Padaung tribe***. Copper coils are fitted around the neck to elongate it!

The lightest human on record was ***Lucia Zarate*** of Mexico. 2½ pounds at birth, she weighed only 13 pounds at 20 years.

Life Insurance is the safest, surest way to protect your future. Find out about it.

Life Insurance Corporation of India

daCunha-LIC-101

Next: The Two Find-outers say hello to the world's human-est creatures.

Vol. 27 No. 6 January 1981

sunshine

The Magazine for Youth
Founded in 1954

PURPOSE

This Indian Youth Monthly is sponsored by the Children's Sunshine Concerns, a registered non-profit educational Public Trust organized to ensure the all-round welfare of youth and to promote international understanding. SUNSHINE, founded in 1954, aims at fostering among boys and girls, 10-16, a democratic attitude, the service-above-self ideal, a sense of national unity and a world outlook. It also provides them with general knowledge, citizenship training, hints on efficiency and growing up, and English language practice.

Editor-Publisher	***Veronica Krishnayya***
Editorial Assistant	***B. Chandra Rao***
Art and Production	***Rita Braganza***
Circulation	***A.S. Munshi***
	Vijaya Damodar
	Krishnakumari Nair
	R.S. Anand
Accounts	***T.M. Titus***

POST-FREE SUBSCRIPTION RATES
INDIA AND NEPAL

	For Schools	For Home
Yearly	Rs. 18	Rs. 12
Two Years	Rs. 34	Rs. 22

(Special Bulk Rate: Ten or more copies to a single address at Rs. 10 each.)

Payment should be sent by M.O./Postal Order/Bank Draft addressed to SUNSHINE.

OTHERS

	Airmail	Seamail
Gulf Countries & U.K.	Rs. 45	Rs. 30
U.S.A.	$ 8	$ 4

FOUNDER-EDITOR
Dr. G. S. Krishnayya (1898-1967)

One-time Principal, Govt. Teachers' College, Belgaum: Educ. Attache, Indian Embassy, U.S.A.; Inspector of European Schools, Bombay State; Prof. of Education, Kolhapur & Mysore. Author of *Pathways to Prose and Poetry, Citizenship Training in School, The Rural Community and the School.*

SUNSHINE, 3 Parvati Villa Road, Poona 411 001, India.

Contents

Editorial	**Page**
New Year Jottings	5
Stories	
Let the Balloon Go *by Ivan Southall*	6
Hijacked — Part VI *by J.M. Marks*	10
My Youth and Childhood *by Albert Schweitzer*	24
Science & Technology	
Animals — *Answers to October '80 Quiz*	12
Science News & Notes	21
Features	
Letters to the Editor	8
'A Wish' *by Eleanor Farjeon*	8
The Ideal Student	9
SUNSHINE — EAGLE FLASK QUIZ CONTEST — Do You Know?	15
BY YOU: Young Writer's Section — Two Poems *by Jairaj Mothi Anthony*	16
CALENDAR for February '81	18 — 19
Puzzles & Pastimes	22
Maths Puzzles	23
Riddles	23
Points Winners	29
Penfriends	30
Laughs	33

Our Cover: ***The Circle of Youth*** by Pablo Picasso. This year SUNSHINE celebrates the 100th birth anniversary of this most influential of 20th century artists.

SUNSHINE is approved and recommended for use in schools, colleges and libraries by the Education authorities in all the State of India.

Do You Subscribe to SUNSHINE Yet?

If Not, then
do yourself a favour and be
the best-read student in town ....

be a* SUNSHINE *reader

Just send an M.O. for Rs. 12/- to
The Manager
SUNSHINE
5 Parvati Villa Road Poona 411 001.

New Year Gottings

Republic Day reminds us every year of the fact of our Nationhood, the fact that we, ourselves, will soon be full-fledged citizens of India. It makes us want to stop and consider questions about the relationship between each one of us ... and the State. And these are very important questions, indeed. The greatest minds of all time have thought about them, from Plato, in ancient Greece, to Gandhi. These thinkers have tried to balance out the rights of the citizen, which must be respected by others, and the *duties* that we must carry out for the common good. Most recently, many of these rights and duties were debated upon during and after the Emergency. Much hope was placed in the young people, whom, many persons felt were less corrupt and definitely more idealistic, hence more conscious of their rights and civic duties; it was felt that they would respond to the need for public life to be given a base of morality. We hope you young citizens will fulfill the trust placed in you.

The U.N. has proclaimed 1981 as the International Year for the Disabled. To help you approach this year in the right spirit, the spirit of empathy, of understanding and of friendship, we bring you extracts from the book **Let the Balloon Go** (See p 6), and poems by young Jairaj Mothi Anthony, (p16). Disabled people hardly need our pity. What they really need is to be treated like fellow human beings. We must remember that they, too, have rights to be honoured and duties to fulfill, just like any one of us. *Except*, they *do* need our help and cooperation to make life just a little easier.

On pages 18 and 19 you will find a new feature — the monthly Calendar which gives you the birth-dates of some of the great figures of the past — poets, inventors, artists and explorers — they have all played an important part in shaping our civilization. If all the personalities are not familiar to you, we hope you will find out about them. We have also left you enough space to fill in important dates and events in your own life.

Happy Reading and .....

SPREAD SUNSHINE!

Your Editor

How many friends have *you* made into subscribers so far?

John Sumner is twelve and lives outside Melbourne. He has the normal healthy wish to play games and climb and swim like any other boy, but he is a spastic, his body won't always do what he wants it to, and an over-anxious mother and well-intentioned friends are driving him mad with frustration. 'Sometimes he thought he would explode. Didn't they know that a balloon was not a balloon until someone cut the string?'

This is the story of how John cut his own personal string. For the first time ever, he is left alone at home for the whole day — free to do all those things he wants to do because there is no one to tell him that he can't do them. How many of us would be brave enough to do what John does?

We give you a few extracts from the story, ***Let the Balloon Go,*** *which is a very unusual and exciting account of one special day in the life of a handicapped boy, and how he uses his now-or-never freedom. With so much attention now being focussed on handicapped or 'disabled' people, it is especially important that we try and understand something of what it might feel like to be 'treated special'. We hope you will read the entire book.*

LET THE BALLOON GO

by
Ivan Southall

'You mustn't chop wood or use a saw or hammer nails or swing on the monkey bars or ride a bike or get into fights or play football or cricket or rough games with boys or girls in case you injure yourself. You mustn't run fast in case you fall. You mustn't go near the edge of cliffs or climb trees or ladders in case you overbalance.

'Of course there are lots of things you can do and we must be thankful for that, mustn't we? You don't, after all, have to go to a special school. You can swim in shallow water if someone is with you. You can be time-keeper for the football team and scorer for the cricket team and they're both very important jobs. You can read books and watch TV and listen to music and collect things. And you do have a marvellous imagination. With that there is almost nothing you cannot do. In your imagination you can swim the broadest river,

---

from **Let the Balloon Go** by Ivan Southall. **A Puffin Book.** Published by Penguin Books.

run the fastest race, climb the highest mountain — and believe you me, lad, the adventures of the mind in the long run are far more exciting than the adventures of the body.'

How stupid it was, all those grown-up words, all those grown-up meanings ... It made him sick and they thought he didn't mind; patted him on the head and called him a good boy, squeezed his shoulders and smiled at him, told him he was wonderful, he was clever, he was brave. But all the time they were only telling him that he was different, was as good as useless, was a dreadful worry to everybody, was half a boy, not a whole boy, was a peculiar little object known as John Clement Sumner who had to be handled carefully like a broken egg.

Surely by now they should have guessed that he was a whole boy bound hand and foot, that they had made his body into a prison, that he was a young lion in chains, that he was an eagle with clipped wings, that he was really a Herb Elliot, an Edmund Hillary, a *Hercules?* Didn't they know that a balloon was not a balloon until someone cut the string?

So, the day his mother left him at home, John climbed the gum tree. Yes, with the help of a ladder, he climbed fifty feet into the air!

The earth was way down below where gloom and misery were, and it could bally well stay there.

He sang in the sky, 'Hi there, everybody; I'm up in the tree.'

Every cell of his body sang in the sky, 'Yo-ho-ho. Yo-ho-ho.'

He wriggled higher again and prised off flakes of bark and flung them through the leaves with a sound like waterfalls. He stuck a green twig between his teeth and chewed on the sap. It was nectar, sweeter than honey; sap that flowed in the sky.

He went on with his hands out before him, reaching up, pulling up, and he wasn't the little spastic kid anymore; he was the red-blooded boy that everyone had stifled; had said wasn't there.

'Yo-ho-ho.'

He was an eagle, a mountaineer. He was Hillary scaling Everest.

It was everything he had longed for and never known. All words fled away, all demands that others should see him meant nothing any more. The bough

☞ 34

Your magazine is superb. May it do a world of good to our younger generation, preparing them for their future lives and inspiring them with high ideals'.

Sr. Mary Amata,
Sacred Heart Convent,
MATHURA.

I am in-charge of the extra-curricular activities of the upper classes, and organize the G.K. tests for which each class VIII XII gets a prize, and I was most upset at the prospect of SUNSHINE not being published any more! Both the Principal and I would like class VII to be included in the G.K., test and so we will be glad to increase our subscription list to 275 copies per month. Right from the start SUNSHINE has been considered by us as a 'text book' and each child (2 or more sisters are charged for only one copy) pays an annual subscription charged in the bill.

I have already asked other Principals and teachers of our other I.B.M.V. schools to subscribe or increase subscriptions.

Sister M. Josephine,
St. Mary's Convent
High School,
NAINI TAL.

A Wish

A glad New Year to all!-
Since many a tear,
Do what we can, must fall,
The greater need to wish a
glad New Year.

Since lovely youth is brief,
O girl and boy,
And no one can escape a
share of grief,
I wish you joy;

Since hate is with us still,
I wish men love;
I wish, since hovering hawks
still strike to kill,
The coming of the dove;

And since the ghouls of terror
and despair
Are still abroad,
I wish the world once more
within the care
Of those who have seen God.

ELEANOR FARJEON

This year marks the 100th birth anniversary of this well-loved children's poet.

Making resolutions for the New Year?
Here are some suggestions on how
you can be

The Ideal Student

1. Obey Rules.
2. Participate in many extra-curricular activities, projects, etc.
3. Be serious about your studies.
4. Avoid the wrong kind of cliques.
5. Be willing to help others if studies come easier to you than to them.
6. Be an individual. Stand up for what you think is right instead of taking refuge in group opinions.
7. Set standards of achievement and excellence instead of conforming to mediocre ones.
8. Strive for the maximum in everything instead of the minimum. Put your best effort into *all* you do.
9. Do your best rather than merely what is expected of you.

CONTEST

It Was Just An Ordinary Day Until .....

Complete this sentence with as imaginative and fanciful a one-page story as you can. Not more than 500 words.

Upto **5 points** will be awarded for the cleverest and most creative stories.

Last date: March 10

The Story So Far:

14-year-old English boy, Jason Wright, is on vacation in Hong Kong where his father is working. During the holidays Jason trains in swimming very strenuously. He returns to school a week early to try out for the Swimming Championship. The plane is filled with people of various nationalities; Jason is asked to keep an eye on two small children who are travelling alone.

The plane is hijacked by three Japanese passengers, members of ***Rengo Sekigun,*** *the suicide squad of the so-called Japanese United Red Army. The plane crash lands near, Malaya; three passengers who try to attack the hijackers are ruthlessly overpowered. The plane's Captain Chisholm is himself struck violently and knocked unconscious.*

Jason discovers a false panel in the bathroom. He is determined to do something to help his fellow-passengers, so he uses this panel to let himself out to the luggage bay and then into the sea. He swims as hard and swiftly as possible, but he has been spotted. One of the Japanese pursues him. That night, Jason is able to elude his pursuer; he gets to the beach and takes refuge in a sand pit. But in the morning, on the beach below him, Jason sees a stocky man, walking briskly along, a sub-machine gun slung under one arm.

Now read on ....

HIJACKED!

J.M. Marks

Serial Story — Part VI

The hijacker was closer now, not much more than a hundred yards away, and as he walked he scrutinized the sand just ahead of him. Jason felt his heart lurch in his chest. Below him his footprints led up from the sea straight to the hollow where he lay.

Jason turned and crawled from the sand-hollow, keeping flat between the clumps of coarse grass. His back muscles twitched as he moved, but he reached the fringe of bushes undetected, forcing himself through beneath the lowest branches — and found himself caught

in a tangle of springy stems. He felt forward into the tangle, found a main trunk and started to pull himself through, but the rubbery stems, like bundles of thin arms, seemed to stretch out to hold him.

Terrified of shaking the leaves and giving himself away, he paused and, very cautiously, turned his head and looked over his shoulder at the Japanese, now nearly directly below him. As Jason watched, the hijacker's pace quickened and he ran forward, bent to examine the sand, straightened up, turned and walked quickly up towards the palm line, unslinging his automatic as he came.

Jason heaved with both arms and thrust with his feet. He heard a shouted command. Jason heaved again, burst through the clutching stems and rolled among tree-ferns. He bounded up, scuttled on all fours through the thicker undergrowth, and once among the tall trees got up and ran for his life. He ran wildly, zigzagging, leaping exposed tree-roots, stumbling and running on again, his ears straining backwards for sounds of pursuit. The level ground sloped upwards, he began to slow down and turned and raced along the foot of the slope. He had covered a good eighty yards before he heard the crash and rattle of something forcing through the same hedge of bushes, and the sound galvanized him: he must hide, he couldn't keep running, he'd he heard — and his bare feet stung and ached.

A big white tree with buttresses at its base was just ahead of him, and he half-fell, half-scrambled round behind it and crouched between two of the growing supports. He drew a shuddering breath — this great tree was too obvious. He slipped away from it, risked a glance back, saw thorn fronds jerk and shake, scuttled to one side and flung himself flat behind one of the fallen and rotted branches on the ground.

Jason heard the pad-scrape, of trotting feet across the slope till they were just above him.They paused by the big tree, he pressed his face closer down against the earth, he heard the feet again, they padded on and he lay, hardly daring to breathe, till the sound died away. At last he raised his head and lay listening. He caught a distant sound, then silence. He turned and, crouching low, set off at a run up the slope and deeper into the forest.

After the first moments Jason realized that he was running uphill. He soon stopped, his breath coming in great shuddering gasps and his leg muscles twitching with effort. He crouched on the ground and looked about him. All around were tall, straight forest trees, crowding in on each other so that, whichever way he looked, he saw only columns of trunks reaching up to the sky. From there, he heard bird calls, but down on the forest floor there was stillness and quiet. If he too stayed quiet no one would ever find him.

He stood up, felt stabs of pain from both feet, sat down again and looked at them. Long shallow cuts criss-crossed his ankles, cuts as fine as if made by a razor-blade, and his soles were studded with small black dots, — snapped-off thorn spines. He tried to pull some of them out but soon saw that he needed tweezers. His heels and the sides of his feet had escaped. He got up and stood listening. There was no sound, no leaf moved, he heard no footstep. Had that Japanese gone back to the aircraft? But he also listened for what he did not

☞ 26

Answers to
SUNSHINE-EAGLE FLASK QUIZ CONTEST
OCTOBER 1980

Animals

I. a) How do Cats purr? b) How do Crickets 'sing'? c) How do Bats hear? d) How does a Snail move?

a) Cats purr by means of special vocal cords that vibrate when they breathe. Cats usually purr when they are contented or happy.

b) Each wing of the cricket has a "file" or thickened vein with cross-ridges, and a "scraper" or hard, sharp-edged portion. The scraper of either wing may be rubbed against the file of the other wing to produce its merry song. *(see illustration)*

c) They fly by means of echo location.(See the answer to Q II bi).

d) A snail moves by stretching and pulling muscles in its foot — the large, fleshy part of the snail's body that rests on the ground. A gland in front of the foot oozes a sticky slime to make it easier for the foot to slide along.

II. a) Name 6 creatures that come out at night. b) Name 3 special features that they possess.

a) Bats, Owls, Fireflies, Moths, Cats, Nighthawks, Mosquitoes, Crickets.

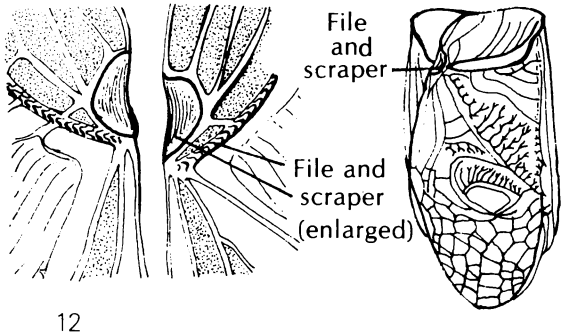
b) i) *Good Hearing* — e.g. insect-eating Bats send out short, high-pitched chirps as they fly through the dark. Echoes of these chirps bounce off objects in the bat's path. By listening to these echoes with its large ears, the bat is able to zoom in on its prey.

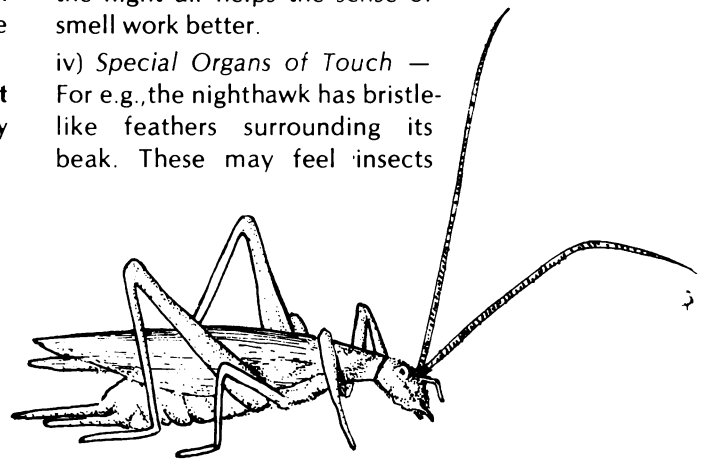
Moths, in turn, can hear the bat's high-pitched sounds, even though we can't. They fold their wings and drop to the ground; or they change their direction in mid-air.

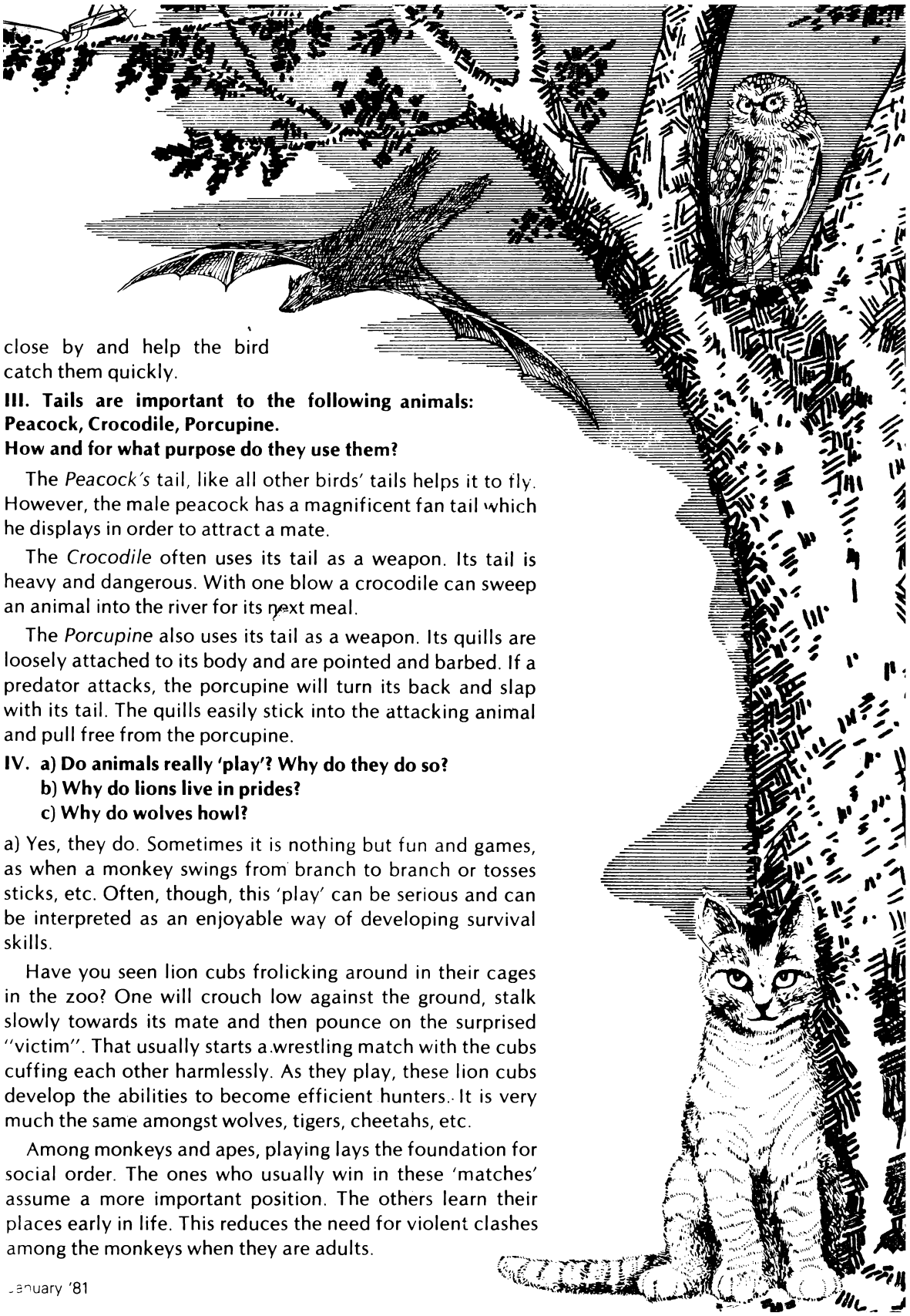
ii) *Good Eyesight* — Very often the eyes of night animals are very large, to allow as much light as possible to enter. The owl has large, bell-shaped eyes which leaves no room in its head for the eyes to move. But the owl can turn its head almost completely around without moving its body.

iii) *Good Sense of Smell* — Night animals often sniff the air, not only to discover enemies but to find mates and food. The dampness of the night air helps the sense of smell work better.

iv) *Special Organs of Touch* — For e.g., the nighthawk has bristle-like feathers surrounding its beak. These may feel insects







close by and help the bird catch them quickly.

III. Tails are important to the following animals: Peacock, Crocodile, Porcupine.
How and for what purpose do they use them?

The *Peacock's* tail, like all other birds' tails helps it to fly. However, the male peacock has a magnificent fan tail which he displays in order to attract a mate.

The *Crocodile* often uses its tail as a weapon. Its tail is heavy and dangerous. With one blow a crocodile can sweep an animal into the river for its next meal.

The *Porcupine* also uses its tail as a weapon. Its quills are loosely attached to its body and are pointed and barbed. If a predator attacks, the porcupine will turn its back and slap with its tail. The quills easily stick into the attacking animal and pull free from the porcupine.

IV. a) Do animals really 'play'? Why do they do so?
b) Why do lions live in prides?
c) Why do wolves howl?

a) Yes, they do. Sometimes it is nothing but fun and games, as when a monkey swings from branch to branch or tosses sticks, etc. Often, though, this 'play' can be serious and can be interpreted as an enjoyable way of developing survival skills.

Have you seen lion cubs frolicking around in their cages in the zoo? One will crouch low against the ground, stalk slowly towards its mate and then pounce on the surprised "victim". That usually starts a wrestling match with the cubs cuffing each other harmlessly. As they play, these lion cubs develop the abilities to become efficient hunters. It is very much the same amongst wolves, tigers, cheetahs, etc.

Among monkeys and apes, playing lays the foundation for social order. The ones who usually win in these 'matches' assume a more important position. The others learn their places early in life. This reduces the need for violent clashes among the monkeys when they are adults.

A healthy male lion can eat about 75 pounds of meat at one sitting, hence the prey it seeks has to be correspondingly large — wildebeest, large antelopes, zebras, buffaloes, etc. To pull down such a large target in the open savannahs is no easy task. Hence, they live in prides. This facilitates team work. Prides may consist of a dozen or more lions working in pairs. Sometimes one lion pursues a single animal, driving it towards a waiting partner. Or, several lions may encircle small herds, then charge.

Another reason for living in prides is that those males that do not excel as hunters specialize in protecting the cubs against predators.

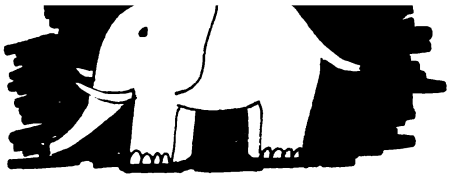
c) Contrary to what we've always heard, wolves do not howl because they are lonely; nor do they bay at the moon. Howling plays an important role in relating to the wolves' territory. A pack of wolves may stake out an area covering many square miles, so individual members or the pack howl just to keep in touch with one another when they are separated. Howling also keeps different packs of wolves away from each other. Wolves jealously protect their territory, but they need all their strength to survive; so rather than fight, they howl.

V. When your Mother tells you to "take the bull by the Horns," you know that she wants you to face and grapple with a difficult problem.

Give us 4 more popular animal sayings and tell us what each means.

1) *Sing a Swan Song* — Swans don't sing but there was an old belief that each swan sang just once — one lovely song before it died. Today, a swan song means someone's last fine effort — for instant, a last thrilling match before a tennis player retires.

2) *Let the Cat Out of the Bag* — If you've ever carried your cat in a box and opened the lid just a tiny bit, what happened? Your cat jumped out! Well, when you're trying to keep a secret, don't tell even one person or before you know it the secret will be out and you've let the cat out of the bag.

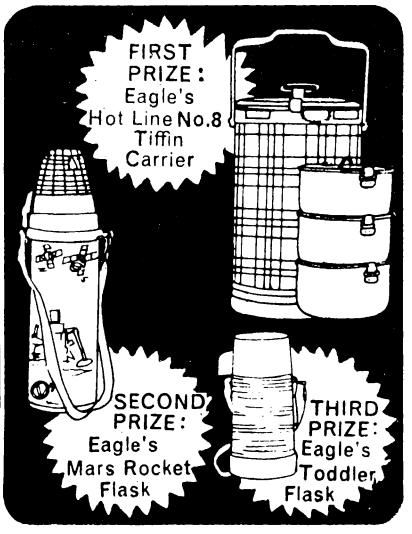


3) *Buy a White Elephant* — A white elephant is something valuable you don't really want or cannot use. The saying comes from Thailand where elephants do heavy work. Long ago the rare white elephants were too special to work, and they all belonged to the king. He usually gave the white elephants to people whom he disliked. This 'honour' was usually a rather expensive botheration.

4) *Cry Crocodile Tears* — Crocodiles don't really cry. But once, it was thought that they did. People thought crocodiles cried not because they were sad, but to make a kind passerby stop to see who was crying. As soon as the person came close, the crocodile would *snap* him up and eat him! Now, when people pretend they are sad when they're really not, its called, "crying crocodile tears".

VI. Rearrange this mixture to produce 8 famous books and poems and their authors: Piper, Doyle, Kim, Cuckoo, D.H., Beauty, of, Sewell, To, Lewis, Kipling, Moby, The, of, Wonderland, Melville, Williams, the, Baskervilles, Carroll, Wordsworth, Pied, Lawrence, Rudyard, Hamelin, the, Bat, Arthur, Herman, Browning, Black, The, Alice, Hound, The, In, Dick, Robert, Anna, Conan.

1. To the Cuckoo — William Wordsworth
2. The Pied Piper of Hamelin — Robert Browning
3. Black Beauty — Anna Sewell
4. Moby Dick — Herman Melville
5. Kim — Rudyard Kipling
6. The Hound of the Baskervilles — Arthur Conan Doyle
7. Alice In Wonderland — Lewis Carroll
8. The Bat — D. H. Lawrence ■



DO YOU KNOW?

1. What gives butterfly wings their beautiful colouring?
2. Are sponges plants or animals?
3. After what Greek hero is the tendon of the heel named, and why?
4. Why does a dog turn round before lying down?
5. What is a fresco?
6. What gives fire works their colours?
7. How does the earthworm help the farmer?
8. Why does dew not form on cloudy nights?
9. How did 'pig iron' get its name?
10. Which Italian artist painted *Mona Lisa* and where is this picture to be seen?
11. What is the difference between *black tea* and *green tea?*
12. Why did the Ancient Egyptians put straw in their bricks?

Be sure to write comprehensive answers to each of the above questions.

Send your answers to these questions on a separate sheet together with the coupon. Three lucky all-correct winners get Eagle Flasks. Upto 4 points will be awarded on merit to the rest of the winners.

SUNSHINE-EAGLE FLASK CONTEST

Name: _____

S.R. No.: _____

Address: _____

Last Date: **March 10**

The Deer Says

The Deer says ....
With those beautiful eyes
Standing in the morning sun
Near the water
Beauty unchanged —
Lowers its head to drink water
Unaware of the human hunter
Who's ready to kill it
Kill the beauty
Kill the glance
of those beautiful eyes
For skin and musk?
But am I not more beautiful when alive?
The Deer says ....
With those beautiful eyes

The Seed Fell On The Ground

The seed fell on the ground
In the hope of bringing life
and fruit;
But the ground it fell on was
parched graveyard
The seed was sad and hopeless
Choking, gasping, suffering
in the hot scorching sun.
"Am I going to die ....
without producing life?!"
The seed thought, prayerfully.
Clouds gathered, in answer
black clouds full of water.
Then it rained, and rained
The parched ground laughed happily
The seed was full of joy
After some days a sapling stood
Swaying gently in the breeze
Saying "thank you" to the Lord God
of all.

by
Jairaj Mothi Anthony
802/56, Bhawani Peth
PUNE 411 002

Hearty Greetings on the Republic Day

On January 26, 1950 the people of India laid the foundation of a Sovereign Socialist Secular Democratic Republic. In the past 31 years we have many achievements to our credit.

We have

- ☐ **Set up democracy on a strong foundation;**
- ☐ **Overcome chronic food shortages;**
- ☐ **Emerged as one of the most industrialised countries;**
- ☐ **Risen to be a top ranker in Science and Technology;**
- ☐ **Fought off successfully three external aggressions**
- ☐ **And our voice counts in international forums.**

Yet much more has to be achieved for securing complete social justice to all and raising the standard of living of the people.

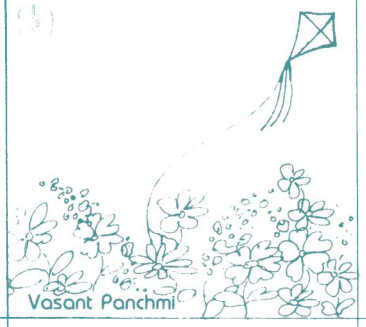
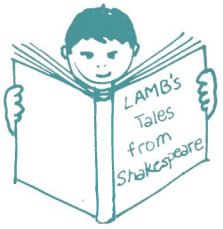
This can be done only through strong bonds of national unity.

Consolidate National Integration And Strengthen Secular Forces For Progress And Security

davp 80/320

FEBRU

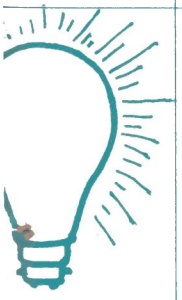
February's Flower —
Primrose

Sunday	Monday	Tuesday	Wedne
1 First Volume of the Oxford English Dictionary Published in 1884			
8	Vasant Panchmi 	Charles Lamb Born 1775 	Thomas A. Edison
15 Galileo Galilei Born 1564			
22 Frederic Chopin Born 1810	Johannes Gutenberg Born 1400		

The chief functior

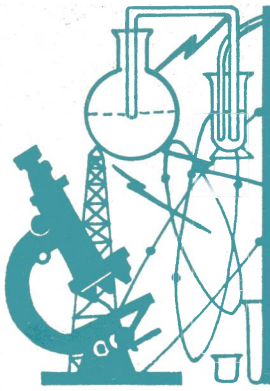
ARY '81

Birthstone — **Amethyst for sincerity.**

esday	Thursday	Friday	Saturday
	5	6	7
			Charles Dickens Born 1812
 born 1847	12 Abraham Lincoln Born 1809	13 Sarojini Naidu Born 1879	14
19	Nicolaus Copernicus Born 1473	20	21
26	27	28	

of your body is to carry your brains around — Thomas Edison.

"Nutramul costs less than others!"
Nutramul
About 3 rupees less.
Nutramul is a shining example of the Amul philosophy: highest quality at lowest cost.
No wonder thousands are changing to Nutramul every day.
AMUL'S
Nutramul
Marketed by
Gujarat Co-operative Milk Marketing Federation Limited, Anand Gujarat
daCunha-GCM-31R



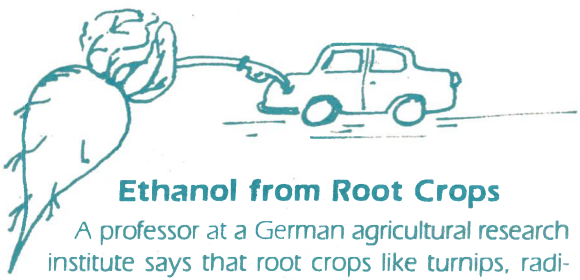
SCIENCE NEWS AND NOTES

More Durable Mud Houses

Two simple and inexpensive techniques have been developed to protect mud walls from erosion caused by heavy rains.

The technique developed by the National Buildings Organisation comprises of mixing bitumen (tar) emulsion with ordinary mud plaster, prepared with Bhansa and cow dung, and applying it on mud walls. The second technique evolved by the Central Building Research Institute requires one to spray a solution of coaltar in kerosene oil over the mud walls with the help of an ordinary spray pump.

Thatched roofs can also be protected from early decay and from fire by applying the bitumen stablised mud plaster.



Ethanol from Root Crops

A professor at a German agricultural research institute says that root crops like turnips, radishes and even carrots can prove crucially important as a source of alternative fuel and power. He says that root crops can be used to produce **ethanol** which is a vital raw material for the chemical industry and also a fairly inexpensive mixture for motor fuel.

Ethanol added to petrol or diesel oil makes gasohol; it does no harm to the engines as experience in Brazil has shown. In Brazil ethanol is refined mainly from sugarcane. (See SUNSHINE July 1980).

New Bio-Diesel Generator

A BIO-GAS operated generator capable of producing electricity for lighting rural homes, driving irrigation pumps and operating farm machinery has been developed by the Indian Institute of Technology, Delhi. The engine used in the generating set is a conventional diesel engine with some modifications enabling its operating with bio-gas as the main fuel. Nearly 85 to 90 per cent of its fuel requirement is met by bio-gas generated from farm and animal wastes. For the remaining ten to fifteen per cent, diesel is used in the conventional manner just to initiate and assist combustion of bio-gas.

A Solar Cooker In The School Staff Room?

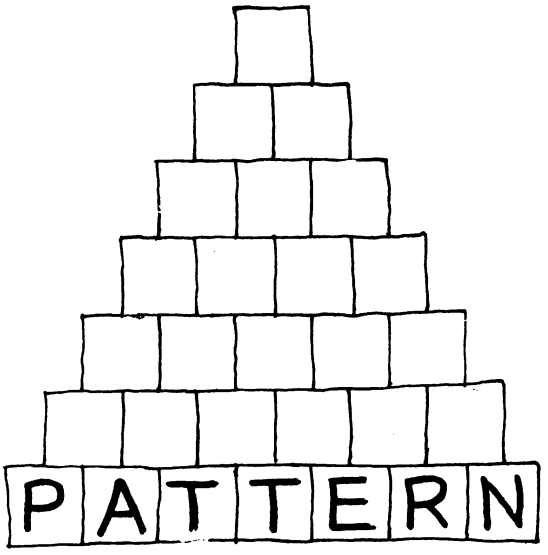
Have you ever thought that it could be possible for your teachers to make tea or coffee in their staff room by using a solar cooker? The Chinese seem to have invented one by using bamboo and small parabolic mirrors.

The cooker is simple. It consists of a collapsible wooden box on an adjustable stand which unfolds horizontally. Inside each half are 396 simple mirrors laid out on a parabolic surface. Sunlight striking the mirrors is focused on the cooker which is mounted on a hardened bamboo tripod attached to the device. This creates an incandescent light source, the temperature of which may rise as high as 600 degrees centigrade. This enables the device to be used for any kind of cooking purposes such as baking bread, boiling vegetables and heating noodles.

With a total light area of about one square meter, the solar cooker is equivalent in heat energy to an electric oven of 1 kilowatt.

This solar cooker has a number of advantages, one of which is that it is highly efficient. Its curved surface makes it so. The cooker is designed to prevent the shadows of the cooking utensils from falling on the centre of the collecting surface. And if some pieces of mirror get damaged, they can easily be replaced. Also, transportation is simple. The cooker can be folded into a portable box — the whole set weighs only 15 kilos.

PUZZLES AND PASTIMES



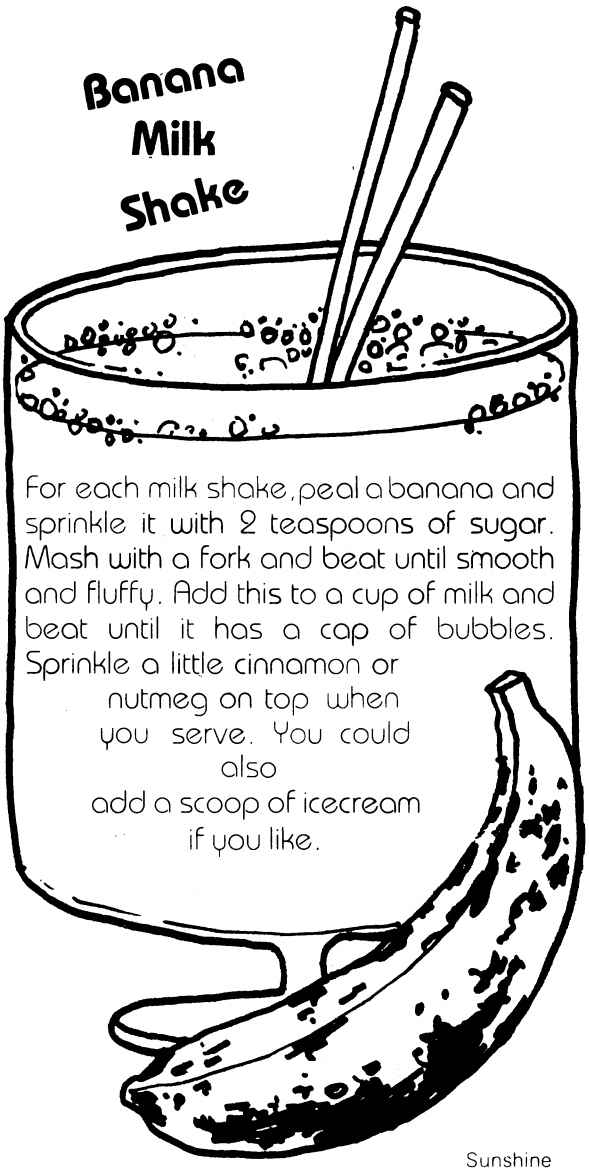
Word Game

In this word pyramid start from top to bottom. Add only one new letter to each row to make a new word. Letters can be regrouped at any time. The last added letter must make the word PATTERN.

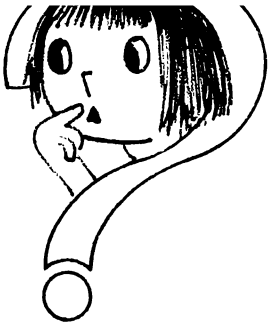
Special Scrapbooks

Around the World — Get some old magazines, postcards, newspapers. Cut out pictures of people dressed in costumes from different countries. Label each one as you paste it in your scrapbook. Soon you will discover that no possible foreign outfit escapes your eye.

Riddle-Me-Ree — Everyone enjoys a good riddle. Look for them in books and magazines — SUNSHINE has plenty. Copy or cut them out; then paste them in your book. You could illustrate some if you like. The riddles will provide you with a lot of fun. Besides, you could lend your book to sick friends, to help them while away the dull hours in bed.



For each milk shake, peal a banana and sprinkle it with 2 teaspoons of sugar. Mash with a fork and beat until smooth and fluffy. Add this to a cup of milk and beat until it has a cap of bubbles. Sprinkle a little cinnamon or nutmeg on top when you serve. You could also add a scoop of icecream if you like.



Riddles

1. What is in patches, but never made a hole?
2. Which takes the least time to get ready for a trip — an elephant or a rooster?
3. Why is the sun like a loaf of good bread?
4. Why did the stars call a doctor?
5. Unable to think, unable to speak, yet tells the truth to all the world. What is it?
6. Why is a dog biting his tail a very good manager?
7. What is that which is bought by the yard and worn by the foot?
8. What has four fingers and a thumb, but lacks flesh or bones?
9. What's always running but can't get anywhere?
10. What flower should be kept in a strong cage?
11. Why is a nail in a board like a sick person?
12. Do you know something that would tickle everybody?

Answers on Page 34

Maths Puzzles

LETTERS FOR DIGITS

Following are additional sums with letters substituted for digits. The same letter stands for the same digit whenever it appears, and different letters stand for different digits. Write the sums out with numbers substituted for letters.

1.

```
  A B L B
+ B G L B
---------
  L Z A A
```

2.

```
  D H E S
+ J H H S
+ R H D S
---------
  H H J H
```

ATTENTION SUBSCRIBERS

1. Entries to quizzes and contests, 'Think & Write', By You contributions, requests for printing names in the Pen Friend's section, Puzzles, etc. should be sent on separate sheets. Each entry must have both your name and S.R. number. It is not enough to write your name and address on the envelope alone.
   Entries of those disregarding the above rules will not qualify for Points.
2. Mention your name, age, address and interests clearly for the Pen Friends section.

On January 14 we celebrate the birthday of the great Albert Schweitzer. In our October 80 issue. p.21, we carried a brief sketch of his life and now we'd like to give you a glimpse into his childhood. Below we give you extracts from his book MY CHILDHOOD AND YOUTH. We urge you all to read this book written with much humour about the joys and trials of growing up in Alsace, and of how Schweitzer came to hold his deepest conviction, the ideal of 'reverence for life.'

My Childhood and Youth

by Albert Schweitzer

A deep impression was made on me by something which happened during my seventh or eighth year. Henry Brasch and I had with strips of india-rubber made ourselves catapults, with which we could shoot small stones. It was spring and the end of Lent, when one morning Henry said to me, 'Come along, let's go on to the Rebberg and shoot some birds.' This was to me a terrible proposal, but I did not venture to refuse for fear he should laugh at me. We got close to a tree which was still without any leaves, and on which the birds were singing beautifully to greet the morning, without showing the least fear of us. Then stooping like a Red Indian hunter, my companion put a bullet in the leather of his catapult and took aim. In obedience to his nod of command, I did the same, though with terrible twinges of conscience, vowing to myself that I would shoot directly he did. At that very moment the church bells began to ring, mingling their music with the songs of the birds and the sunshine. It was the Warning-bell, which began half an hour before the regular peal-ringing, and for me it was a voice from heaven. I shooed the birds away, so that they flew where they were safe from my companion's catapult, and then I fled home.

From that day onward I took courage to emancipate myself from the fear of men, and whenever my inner convictions were at stake I let other people's opinions weigh less with me than they had done previously. I tried also to unlearn my former dread of being laughed at by my school fellows. This early influence upon me of the commandment not to kill or to torture other creatures is the great experience of my childhood and youth.

from MY CHILDHOOD AND YOUTH by Albert Schweitzer. Published by Unwin Books.

From the age of about ten, the young Albert moved to Mülhausen to live with his Uncle Louis and Aunt Sophie. They didn't have any children of their own, so they offered to let Albert live with them free of cost for the whole time he spent at the Gymnasium or secondary school.

It was especially distasteful to Aunt Sophie that from the very beginning I threw myself on the newspapers. There was at my disposal for this only the quarter of an hour when

the table was being laid for supper, during which I had to interrupt my school preparation work, but then I at once snatched up the *Strassburg Post,* the *Mülhausen Daily Mail,* and the *New Mülhausen Times.* On the alleged grounds that I read nothing but the stories in the 'Literary Supplement' and the murder cases, my aunt did her best to get my newspaper reading prohibited, but I asserted that what specially interested me was the politics, that was to say, contemporary history. The dispute — I was then about eleven — came before the uncle. 'We'll soon see,' said he during supper, 'whether the young rascal reads the political news!' And then he began to examine me as to who the ruling princes in the Balkans were, and what the names of their prime ministers. Next I had to describe to him the composition of the three last French cabinets. Finally I had to summarize to him the contents of Eugen Richter's last speech in the Reichstag. Out of this examination, with its accompaniment of baked potatoes and salad, I came with flying colours, and thereupon the decision was given that I might read the papers not only while the table was being laid, but also when I had finished my lessons later on.

In 1893, when he was nineteen, Albert Schweitzer took his final examination at the Gymnasium.

My leaving examination at the Gymnasium I passed satisfactorily, though not so well as people expected, and the cause of that was the trousers I wore for the occasion! I possessed a black frock-coat which I had inherited from an old relative of my mother's but I had no black trousers. For economy's sake I would not have a pair made, but asked my uncle to let me wear his for the examination. He was much shorter than I was, and fairly stout, while I was tall and thin; however, we thought it would be all right for this one occasion. Unfortunately, I omitted to try beforehand how they fitted, and when on the morning of the examination I put them on, they scarcely came down to my shoes, although I had lengthened my braces with string; moreover, between them and the waistcoat there was a yawning gap. How they fitted me behind I refrain from describing.

My appearance among my fellow candidates produced unrestrained merriment. They turned me round and round so that they might look at every side of me, and our solemn entry into the examination room was anything but *comme il faut,* because we could not control our laughter. When our masters at the table saw the trousers, they too were amused, though the stern School Commissioner from Strassburg who was to preside, failed to see what it was all about. All he could see was that I was the cause of the ill-timed merriment, and he made some severe remarks on our irreverent behaviour in general and on myself in particular. In order to take down the conceit of the supposed buffoon, he undertook to examine me himself in all the subjects except in mathematics. He gave me a hard time ..... He was especially annoyed that I was unable to give him any accurate information about the way they beached the ships, as described by Homer; and as the other candidates knew very little more about it than I did, he denounced our ignorance as a serious defect in our culture. For my part I thought it a far greater defect in our culture that we were leaving the Gymnasium without knowing anything about astronomy or geology.

The last subject of all was history, the Commissioner's own special subject. In ten minutes he seemed a different person! His indignation melted away, and finally, instead of questioning me, he discussed with me the differences between the colonizing efforts of the Greeks and those of the Romans.

In his final address, after the announcement of the results, he mentioned the pleasure I had given him over the history, and a very real compliment, suggested by him, adorns my leaving certificate, which was otherwise a very ordinary one. Thus everything ended satisfactorily. ■

hear — the sound of a helicopter, or perhaps a motor boat. Rescue was still far off. There was nothing for it: he would have to circle as best he could, get back to the beach again and make for a village; he'd never find his way through this forest. He set off up the slope, placing his feet with care and pausing every few minutes to listen. In half an hour he reached a point where the slope levelled out, and then he heard running water, and at that faint sound he realized how thirsty he was.

The stream was a few yards in front of him. He knelt to drink, but paused at a slight sound. There was movement across the stream; he made out an arm, then a small brown body, not quite naked, no more than twenty paces beyond. He stared. Through the twigs and fronds he saw half a dozen lean-to shelters, partially thatched, with a number of small brown people busily plaiting leaves watched by a greybeard smoking a tiny pipe.

Keeping his eyes on the people ahead, Jason crouched and began to crawl forward towards the stream — but his movement was caught. He heard an urgent call of warning, a high rolling guttural, the brown figures sprang up and Jason turned and blundered his way back as fast as he could limp and run. He crashed back between the trees, an arm up to shield his face, and ran till the pain slowed him to a limping trot and finally to a halt.

He began to feel a sense of despair. Here he stood, the forest silent and apparently empty, yet, however much he tried to circle round to the beach again, he seemed to finish up deeper and deeper among the trees, and always pierced by thorns. Then it came

to him that he had heard no sounds of pursuit, and whoever they were whom he had stumbled upon, they were as frightened as he was.

He felt a warm surge of relief, and glanced at his watch. It was barely half past eight in the morning, and as his apprehension ebbed, he thought of the tiny stream.

He must have water. Jason turned and went back very slowly and painfully the way he had come. He was soon back at the little stream. He knelt and drank, gulping down water until his thirst was slaked and he felt uncomfortably full.

He could now see the disturbance in the forest pattern made by the little huts. They were empty. A small fire smouldered on a bare patch in the centre and he looked eagerly for signs of food — hoping for a cooking-pot containing rice or possibly potatoes, but there was nothing but scraps of what looked like the fur of a squirrel, a cut stick, a skewer of bamboo with a charred end and some unknown vegetable scrapings. One after the other he searched the huts, but found nothing.

Even though he knew he was still alone, he felt uncomfortable standing in the little half-ring of huts. Instinctively he felt a need to get into the anonymity of the trees, and he was hobbling carefully off when his eye fell on a long pole propped against one of the huts. It was absolutely straight, with a distinct cone-shaped enlargement at one end —— a blowpipe! Intrigued, he hefted it in one hand. It was light, and made from cane. The cone at one end was the mouthpiece, rather like a thicker version of the mouthpiece of a trumpet. Nearby he found a tiny little cylindrical basket, beautifully plaited from thin strips of cane. It wasn't empty, as he had first thought; it held little stubs of tightly rolled paper. Gently he pulled one out, taking it delicately with the nails of finger and thumb. The white stub was pith, tightly rolled round the end of a slender skewer of bamboo some eight inches long. It had been carefully nicked two inches from the point, and below the nick the skewer was caked with some dark brown substance. Holding it carefully by the pith end he sniffed at the point. It gave off a strong, narcotic odour, and he saw that it was still sticky. He knew what it was: he remembered his father reminiscing about Malaya and Borneo, talking about aborigines and their blowpipes and darts — poisoned darts ...

Jason held the dart gingerly away from him by finger and thumb, conquering his first impulse to fling it into the trees; then the blowpipe caught his eye. He leant over and slid the dart down into it, and the wad of white pith settled snugly into the mouthpiece. Carefully Jason stood the blowpipe against the lean-to then walked back to the stream and sat down to think.

It was warm now in the forest. With his thirst quenched, his one overpowering urge was to get help for the people in the aircraft. He had to get to a fishing village. The quickest way back down to the shore was straight down the spur again; any other way he might get lost and wander for hours. The hijacker would hopefully be back at the plane by now. Jason set off, finding now that he knew more or less where he was heading. He was more than halfway back to the beach and gaining con-

over

fidence with every step when he saw the jerk and quiver of fronds shaking, some way below. He froze. A cropped head turned up towards him, he saw the quick look of recognition and turned and ran.

Sore feet forgotten, Jason raced uphill. Leaves crashed as the hijacker thrust his way up on to the spur and Jason heard the thud of his feet pounding behind. Faintly through the treetops drifted another sound, the distant beat of an engine, but to Jason it meant nothing — he knew only that his hunter followed, and he himself was weakening.

He paused a moment for breath, gasping and crowing, heard running feet and forced himself on, but he knew he was being overtaken. Then it came to him: the camp — he could hide in the camp! He was still just out of sight of the man behind. Jason put on a spurt, ran through the trees to the little stream and plunged across it, and at little more than a trot stumbled into the camp. He could run no more.

He walked a pace or two, gulping for breath, blinking sweat from his eyes, trying to regain control of his shaking thigh muscles, and sank down behind a shelter. For a moment or two he heard nothing and his hopes rose — then he heard a crash-splash from the stream, the pad of running feet, and they burst into the half-circle of huts. They took a pace or two then stopped. Jason held his breath. Slowly, ever so slowly, the feet shifted round and then they stopped again, pointing at his lean-to, and he heard the spring-click of an automatic being cocked.

Jason let out his breath in a deep sigh. He pushed himself up to a high-crouch and stared over the leafy framework, and his eyes met those of his pursuer.

The Japanese took a short pace forward and swung up the muzzle of his gun. In the sudden silence the chug of the diesel sounded closer, drifting to them clearly, and the hijacker hesitated, then let the weapon swing down to his side. Eyes still holding Jason's he flexed his arms, and with forearm, wrist and hand held edgewise ready to chop, advanced on the boy.

Jason backed away — then his eye fell on the blowpipe, propped against the little shelter, and he snatched it up and stood waiting, holding the long tube like a pike. The Japanese smiled in contempt as he reached out to pluck aside the flimsy leaf framework, when Jason with a shock remembered the dart. He sprang back, swung up the blowpipe, set the mouthpiece to his lips and blew fiercely and with all his might.

The hijacker's hand seized the lean-to and gripped it, but his eyes looked down to the pith head of a dart, sprouting from his open shirt front. He looked up again and began to pull round his weapon, but Jason swung back his arm and threw the blowpipe like a javelin, and it struck the hijacker in the forehead with a heavy thud. His head went back and Jason turned, ran a few yards down the path then ducked away among the trees. From the direction of the huts he heard a crashing sound, as if the lean-to was being dragged down, and a hoarse, gasping cry, but he only ran the faster. When at last he stopped, thoroughly winded, from behind him there was only silence.

(to be continued)

Sunshine-Eagle Flask Quiz Contest

'ANIMALS'

1st Prize: ***Malini Panchapagesan,*** 10720, Pune.
2nd Prize: ***Prakash Peres,*** 9663, Bombay
3rd Prize: ***Samanvaya Joshi,*** 977/64, Pune

4 Points: ***Milan Chatterjee*** 8756.

3 Points: ***Karthika V.K.*** 10702, ***Arvind Kumar V. Jain*** 6018/1, ***Rohini Anand*** 10630, ***Mohan Dutt*** 10774, ***Raju*** 9493, ***Geeta Dhingra*** 10758, ***Suresh Gopinath*** 6188, ***Vijayanta Kapil*** 5807.

2 Points: ***Juliet D'Souza*** 2934/43, ***W. Charles Deva Kumar*** 2956, ***K. Amruth Kumar*** 10408, ***Swati Mehta*** 10434, ***Rohit Sanghvi*** 10081, ***Sameer Kashyap*** 10928.

1 Point: ***Bhavin Sheth*** 3319, ***Madhwi Bhatia*** 2525/2, ***Dharani Kumar*** 10612, ***Farida N. Bhagat*** 5893/8, ***Ramakant Shirke*** 977/97, ***Anita S. Desai*** 2470/49, ***Alok Tibrewal*** 10271, ***Olivia D'Cruz*** 2934/63, ***Michael Menezes*** 3018/97, ***Noel Zacharias*** 977/31, ***Renuka Nair*** 2934/51.

WRITE A QUIZ CONTEST

Prize Winner: ***K. Deepa Mohan,*** 10791, Rourkela.
Runner-up: ***Lavita Sequeira,*** 2934/46, Bombay.

Sunshine Points System

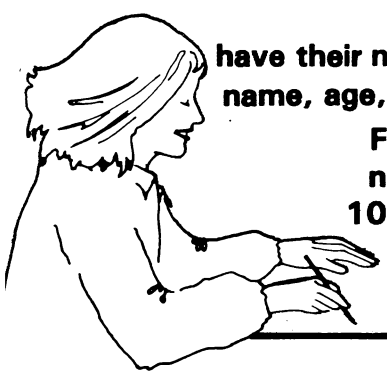
Only REGISTERED SUBSCRIBERS (your S.R. No is printed on the top of each wrapper) can **win points** for the following:

* Contributions accepted and published in the BY YOU Section.
* Reports from Special Correspondents.
* Answers to "Think and Write" exercises.
* Winning essays or poems in SUNSHINE contests,
* Correct Solutions to Quizzes.

In each case we announce, in advance, the number of Points awarded. We keep the scores of all who win Points. In August every year we encash the points of those who have accumulated 9 points and over. **Each is worth 50 paise.** The points of those who have less than 9 are carried over into the next year.

So, send in your solutions, BY YOU contributions, reports and replies and see how many points you can collect before August '81.

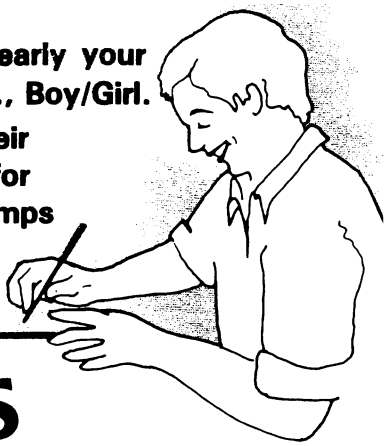
DO NOT FORGET TO QUOTE YOUR S.R. NO. WITH EACH ENTRY YOU SEND.



Only Subscribers can have their names published. Mention clearly your name, age, address, interests, S.R. No., Boy/Girl.

Foreign readers may have their names printed, in exchange for 10 (used) commemorative stamps of their country.

Age limit: 18 years.



penfriends

INDIAN

Somnath Chakraborty (b 16)

2, Surabhaban Area
Flat No. 4
Bistupur
JAMSHEDPUR 831 001
Bihar
Karate, FDC's, reading

M. Anjani Reddy (g 15)

D/o Mr. M.V. Ram Reddy
H.No. 2-8-20/3
Mukrampura
KARIMNAGAR-505 002
Sketching, music, penfriends.

A. Kuppuswamy (b 11)

Std. VI
Sri Ramakrishna Mission
Vidyalaya High School
COIMBATORE 641 020
Tamil Nadu
Stamps, football, reading

Neil Azavedo (b 13)

Don Bosco Apst. School
LONAVLA 410 401
Dt. Poona
Painting, music

Pranab Ghosh (b 11)

C/o Mr. A. Ghosh
Reserve Bank Officers Quarters
Flat. No. 10
PUNE 411 016
Reading, stamps, cricket.

Jennifer Dias (g 17)

Jamna Building
4th Floor, R/58
292, Lokmanya Tilak Marg
BOMBAY 400 002
Drawing, view cards, penfriends.

Rakesh Parikh

C/o Motichand Naraindas
Bada Bazar
UDAIPUR 313 001
Stamps, cricket, penfriends.

Rajesh Dadha (b 17)

M/s Madhur
Cinema Line
RAJNANDGAON, M.P.
Stamps, Gift exchange, penfriends

Kiranmayi (g 13)

D/o Mr. Shankerrao
A.E.L.M.D. Colony
Q.No./A.E/14
KARIMNAGAR, A.P.
Painting, reading, volleyball

Ashish Paranjape (b 11)

67 Anand Park
Aundh
PUNE 411 007
Swimming, music, painting.

Jaspreet Singh (b 13)

8, Kaiser Bungalow
I.C. Road
JAMSHEDPUR, Bihar
Stamps, penfriends, music.

Sona S. Kapadia (g 11)

C/o Mr. Suresh Ratilal Kapadia
21/60 Jayant Mahal
D Road, Churchgate
BOMBAY 400 020
Swimming, stamps, western music

K.V. Ganesh Prasad (b 16)

1867, Rajaji House
Military School
BANGALORE 560 025
Cricket, hockey, chess.

Bhenati Shankaran (g 13)

Type ¼ behind P & T Colony
AJMER 305 001
Gardening, reading, swimming

TO SCHOOL WITH BATA

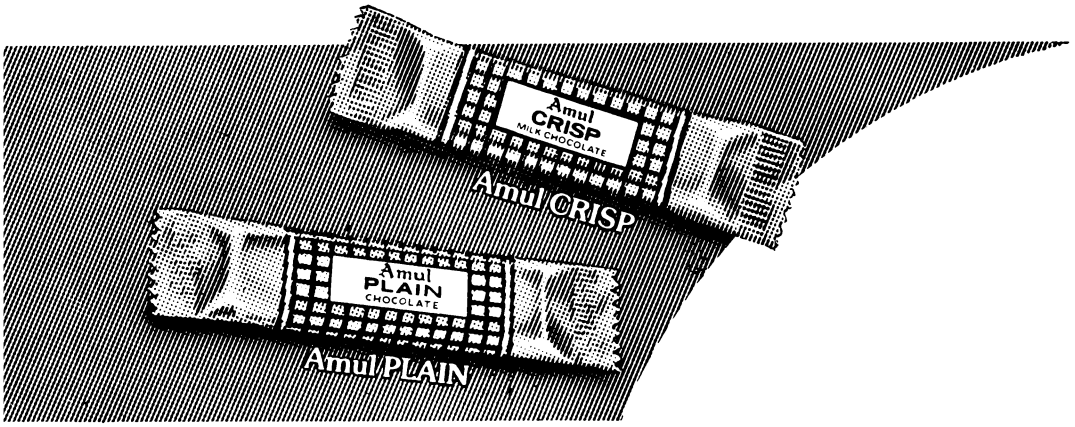
School shoes from Bata ensure a perfect fit and comfort the whole day through for young feet always on the go.

Ballerina 55
Sizes 9-11
12-1, 2-5

Naughty Boy02
Sizes 9-11
12-1, 2-5

Bata

Two more new chocolates from Amul

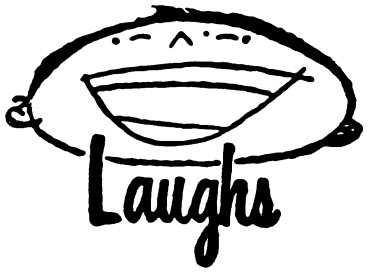


In addition to the earlier four

Wow! Now six Amul chocolates to choose from
Amul ORANGE
Amul ORANGE MILK CHOCOLATE ARTIFICIALLY FLAVOURED
Amul FRUIT & NUT
Amul MILK CHOCOLATE FRUIT & NUT
Amul MILK
Amul MILK CHOCOLATE
Amul PEANUT
Amul PEANUT MILK CHOCOLATE

DEUS/AC-1-80

Gujarat Co-operative Milk Marketing Federation Limited, Anand



Ramu: Does your mother ever spank you?
Shamu: Sure.
Ramu: Your father ever spank you?
Shamu: Yes, he does.
Ramu: Who hurts the most?
Shamu: I do!

A mother went shopping with her small son. The fruit vendor invited the boy to help himself to a handful of grapes. But the boy seemed shy.

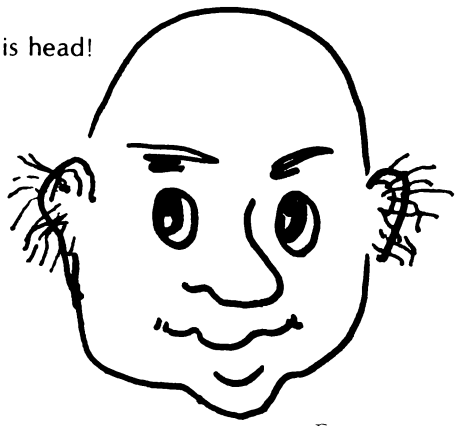
"Don't you like grapes?" the vendor asked.

"Yes," said the boy.

The vendor put his hand in and dumped a generous portion into the little fellow's pocket, which he promptly held out. Afterwards his mother asked him why he had not taken the grapes when first invited.

"Because his hand was bigger than mine", was the answer.

Seema; Mother, look at that man. He hasn't a hair on his head!
Mother: Sh-h-h! He might hear you.
Seema: Oh, doesn't he know?



Big sister: I'll help you with your arithmetic. Now, if I had 10 oranges and gave you 2, how many would I have left?
Binoy: I don't know. In my class we do arithmetic with apples.

Vendor (to boy standing near box of apples): "Hey! Are you trying to take an apple?
Boy: "No, I m trying not to take one."

Larry: I am not going to school any more.
Mother: Why, what do you mean?
Larry: On Monday, the teacher said 4 and 4 make 8. On Tuesday, she said 6 and 2 are 8. Today, she said 7 and 1 are 8. I'm not going back to school again until she makes up her mind.

Peter: My sister's in the first standard and already she can spell her name backwards.
Joan: How smart! What's her name?
Peter: Anna.

Little Sarita was walking in the garden. She happened to see a peacock and one she had never seen before. After gazing in silent admiration she quickly ran into the house and cried out "Oh Grandma, come and see! One of your chickens is on a tree."

ANSWERS TO MATHS PUZZLES
LETTERS FOR DIGITS

1.

```
  A B L B      (i)
+B G L B       (ii)
-------
  L Z A A      (iii)
```

In the last line down A must be even (B+B). And since in the third line down L+L produces A, there cannot be anything to carry from the last line down. Therefore B=O, 1, 2, 3 or 4 and L=5, 6, 7, 8, or 9. But B cannot be O; it is not possible to have O at the beginning of (ii)

If B were 4, then A would be 8; but 4+8 is too large for the first line down. If B were 3, then A would be 6 and L would be 8. But in the first line down 3+6=9 (not 8).

If B were 1, then A would be 2 and L would be 6. But A+B is not 6.

Therefore B must be 2; A=4; L=7 [and 4+2+1 (carried)=7]. Therefore in the second line down, since there is 1 to carry, G=8 and Z=1 (G cannot be 7, for L is 7, and G cannot be 9, for Z would then be 2).

Complete Solution

1.

```
  4 2 7 2
+2 8 7 2
-------
  7 1 4 4
```

2.

```
  D H E S      (i)
+ J H H S      (ii)
+R H D S       (iii)
-------
  H H J H      (iv)
```

(1) Consider the first line down. H must be at least 6 (1+2+3). But if H were 6 in the second line down, we would have [6+6+6 +(perhaps) 2 to carry], and this could not produce H in (iv) [the second figure in (iv) would then be 8, 9, or 0]. And if H were 7, we would have 7x3=21+ (perhaps) 2=23. And if H were 8, we would have 8x3=24+(perhaps) 2=26. Therefore we could not have H as the second figure in (iv).

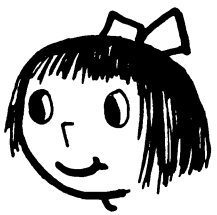
(2) But if H were 9, we would have 9x3= 27+ (perhaps) 2=29. Therefore H must be 9 and there is a 2 to carry from the third line down to the second line down.

Complete Solution

```
  4 9 8 3
+1 9 9 3
+2 9 4 3
-------
  9 9 1 9
```

Answers to riddles

1. Cabbage.
2. A rooster – he takes only a comb, while the elephant takes a trunk.
3. It is light when it rises.
4. Because the night fell.
5. A perfect pair of scales.
6. Because he shows he is able to make both ends meet.
7. A carpet.
8. A glove.
9. A clock.
10. The tiger lily.
11. Both are in-firm.
12. Yes, a feather.



7 ☞ *Let the Balloon Go*

swayed and he swayed with it; the wind was like a cool sea against him; motion and wind together were a great calm that healed every pain he had ever known.

He was strong. He was free. He was a boy like any other boy. ■

Would you like to send **FREE** copies of **SUNSHINE** to your friends or cousins? Send us their names and addresses. We will mail them a copy free of charge.

sunshine – camel

COLOUR CONTEST

No Entrance Fee

WIN PRIZES

CAMEL—1ST PRIZE RS. 15
CAMEL—2ND PRIZE RS. 10
CAMEL—3RD PRIZE RS. 5
CAMEL—5 CONSOLATION PRIZES
CAMEL—10 CERTIFICATES.
SUNSHINE—
5 CONSOLATION PRIZES.

CUT ALONG THE DOTTED LINE

Only students upto the age of 15 years can participate. Colour the above picture in any of the 'Camel' colours. Send in your coloured entries at the following address.

Sunshine, 6, Parvati Villa Road, Pune 411 001

The results will be final and no correspondence regarding the same will be considered.

Name..... **Age**.....

Address.....

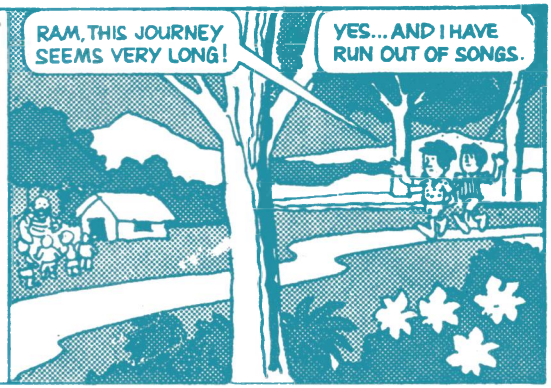
Please see that the complete picture is painted
Send entries before: March 10

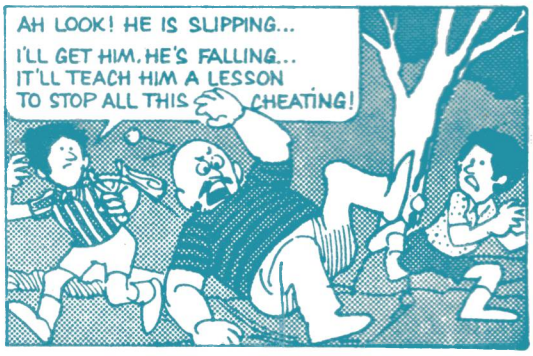
Vision

CONTEST NO.47

Published by Mrs. V. Krishnayya, for the Children's Sunshine Concerns, 6, Parvati Villa Road, Pune 411 001
Phototypeset by Navyug Printers & Manufacturers, Yeravada, Pune 411 006
Printed by Mudra, 383 Narayan, Pune 411 030

RAM & SHYAM GO 'TROUBLE SHOOTING'





LICKABLE
LIKEABLE
LOVABLE
PARLE
POPPINS FRUITY SWEETS
PARLE POPPINS
5 FRUITY FLAVOURS—
RASPBERRY, PINEAPPLE,
LEMON, ORANGE AND LIME.
everest/80/PP/309